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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/641,929	08/17/2000	Kevin G. Currans	10001687-1	6418

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EXAMINER

CHEN, SHIN HON

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 09/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/641,929

Applicant(s)

CURRANS, KEVIN G.

Examiner

Shin-Hon Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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**DETAILED ACTION**

1. Claims 1-4 and 6-23 have been examined.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 4, 6, 7, 10, 20, 21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christensen et al. U.S. Pub. No. US2002/0071559 (hereinafter Christensen) in view of Nunley et al. U.S. Pat. No. 4404649 (hereinafter Nunley) and further in view of Blumenthal et al. U.S. Pat. No. 5784460 (hereinafter Blumenthal) and further in view of Wiegley U.S. Pat. No. 6711677 (hereinafter Wiegley) and further in view of Sansone U.S. Pat. No. 6373587 (hereinafter Sansone) and further in view of Nishikawa U.S. Pub. 20020048039 (hereinafter Nishikawa).

4. As per claim 1, 6, 10, 11, and 20, Christensen discloses a method to control printing of a document file delivered via a computer network (Christensen: paragraphs 9-17 and paragraph 23: printing) comprising the steps of: at a first computer: encrypting at least a first portion of a document file using at least a first encryption key thereby creating a partially encrypted file (Christensen: paragraph 10); transmitting the partially encrypted file to a second computer via said computer network (Christensen: paragraph 11); returning to said first computer at least a predetermined criteria (Christensen:

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paragraphs 30-31), and receiving, in response thereto, said first encryption key (Christensen: paragraphs 13 and 30-31); decrypting said first portion of said partially encrypted file to create a decrypted document file (Christensen: paragraph 14); and printing said decrypted document file (Christensen: paragraphs 16 and 23: output the data). Christensen does not explicitly disclose at said second computer: printing at least a second portion of said partially encrypted file using a serialized print methodology. However, Nunley discloses serialized print methodology that includes having the printer generate a unique serialized print number for the document file in the course of printing the document file (Nunley: summary: the SICN uniquely identifies the document; column 4 lines 10-16 and 46-59: printer print the unique serial number on document). It would have been obvious to one having ordinary skill in the art to combine the teachings of Nunley within the system of Christensen because the unique number can be used to uniquely identify the document to be printed thus allowing the document sender to perform bookkeeping functions. The combination of Christensen-Nunley does not explicitly disclose using the unique identification number as a predetermined criteria for obtaining the decryption key. However, Blumenthal discloses that limitation (Blumenthal: column 3 lines 7-35: the end user sends serial number to obtain decryption key). It would have been obvious to combine the teachings of Christensen, Nunley, and Blumenthal because the serial number allows the document sender to whether the document is being sent to an intended recipient.

Christensen as modified does not explicitly disclose the printer decrypts said partially encrypted file to create a partially decrypted document file. However, Wiegley discloses that a printer decrypting document before being printed (Wiegley: column 1

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lines 60-67). It would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Wiegley within the combination of Christensen-Nunley-Blumenthal because it improves security of the system by reducing the security problems from printer client and printer communication

Christensen as modified does not explicitly disclose printing at least a portion of said partially decrypted document file using a guaranteed print methodology that includes sending the first computer information about the number of printed pages and output print quality of the document file. However, Sansone discloses sending the first computer information about the print quality of the document file (Sansone: summary: check the quality of the printer). It would have been obvious to one having ordinary skill in the art to combine the teachings of Christensen, Nunley, Blumenthal, Wiegley, and Sansone because certain printers are required to print acceptable documents to prevent counterfeiting.

Christensen as modified does not explicitly disclose sending first computer information about the number of printed pages. However, Nishikawa discloses that limitation (Nishikawa: [0053]: transmitted by the printer...total number of pages printed). It would have been obvious to one having ordinary skill in the art to combine the teachings of Christensen, Nunley, Blumenthal, Wiegley, Sansone, and Nishikawa because it allows the user to understand whether the document transmitted for printing has been successfully printed.

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5. As per claim 2 and 21, the combination of Christensen as modified discloses the method in accordance with claim 1. Christensen further discloses said step of returning further comprises the step of providing payment (Christensen: paragraph 36).

6. As per claim 4 and 23, Christensen as modified discloses the method in accordance with claim 1. Christensen as modified does not explicitly disclose said serialized print methodology includes the steps of: generating by a device printing said decrypted document file, a number correlating said decrypted document file to said printing device; returning said number to said first computer thereby enabling said second computer to receive said first key. However, Nunley discloses serialized print methodology (Nunley: summary: the SICN uniquely identifies the document). It would have been obvious to one having ordinary skill in the art to combine the teachings of Nunley within the system of Christensen because the unique number can be used to uniquely identify the document to be printed thus allowing the document sender to perform bookkeeping functions. The combination of Christensen-Nunley does not explicitly disclose using the unique identification number as a predetermined criteria for obtaining the decryption key. However, Blumenthal discloses that limitation (Blumenthal: column 3 lines 7-35: the end user sends serial number to obtain decryption key). Same rationale applies here as above in rejecting claim 1.

7. As per claim 7, Christensen as modified discloses the method in accordance with claim 6. Christensen further discloses said print mechanism is comprised of a computer operatively coupled to a printer (Christensen: paragraph 23 and figure 2: the printer).

8. As per claim 8, Christensen as modified discloses a method according to claim 6. Christensen as modified further discloses said print mechanism is comprised of a printer capable of generating serialized output (Sansone: column 2 line 65 – column 3 line 24: serial number).

9. As per claim 9, Christensen as modified discloses a method according to claim 6. Christensen as modified further discloses said print mechanism is comprised of a printer capable of guaranteeing output print quality (Sansone: summary: check the quality of the printer).

10. Claims 3 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christensen in view of Nunley and further in view of Blumenthal and further in view of Wiegley and further in view of Sansone and further in view of Nishikawa and further in view of Chan et al. U.S. Pat. No. 6378070 (hereinafter Chan).

As per claim 3 and 22, Christensen as modified discloses the method in accordance with claim 1. Christensen as modified does not explicitly disclose before transmitting the partially encrypted file to a second computer, encrypting at least part of said partially encrypted file to form a twice-encrypted file using a second encryption key; and prior to printing at least a second portion of said partially decrypted file, decrypting said twice-encrypted file using at least one of either said second encryption key or a third encryption key. However, Chan discloses that limitation (Chan: column 2 lines 40-47: encrypting the document prior to transmission). Since Christensen discloses partially



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encrypted document, the encryption disclosed by Chan would have been the second encryption on the data. It would have been obvious to one having ordinary skill in the art to one having ordinary skill in the art to combine the teachings of Christensen, Nunley, Blumenthal, Wiegley, Sansone, Nishikawa, and Chan because it would be a non-trivial task for document interceptors to read the document.

11. Claims 12, 13, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christensen in view of Rosenberg et al. U.S. Pat. No. 6363357 (hereinafter Rosenberg) and further in view of Wiegley and further in view of Sansone and further in view of Nishikawa.

12. As per claim 12 and 17, Christensen discloses a method of controlling the printing of a document delivered via a computer network (Christensen: paragraphs 9-17 and paragraph 23: printing) comprising the steps of: communicating, via the computer network, with an entity associated with the document to arrange for the printing of a remaining portion of the document receiving, as a result of said communicating step, an encrypted remaining portion of the document (Christensen: paragraph 11); decrypting said remaining portion; and printing said decrypted remaining portion (Christensen: paragraph 14-16). Christensen does not explicitly disclose printing a first portion of the document with a remote printer, said first portion being unencrypted. However, Rosenberg discloses that limitation (Rosenberg: summary and column 6 lines 40-67: preview the unencrypted portion...in a separate window; Christensen: figure 2: file is

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sent remotely through network to be printed). The difference of claim 12 and 1 is that claim 1 discloses encrypted portion and the unencrypted portion is sent together to the recipient while claim 12 discloses receiving the unencrypted portion first and then communicate for the encrypted portion. It would have been obvious to one having ordinary skill in the art to combine the teachings of Rosenberg within the system of Christensen because it prevents unnecessary downloading of file in case the user doesn't want to receive the document after previewing.

Christensen as modified does not explicitly disclose the printer decrypts said partially encrypted file to create a partially decrypted document file. However, Wiegley discloses that a printer decrypting document before being printed (Wiegley: column 1 lines 60-67). It would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Wiegley within the combination of Christensen-Nunley-Blumenthal because it improves security of the system by reducing the security problems from printer client and printer communication

Christensen as modified does not explicitly disclose printing at least a portion of said partially decrypted document file using a guaranteed print methodology that includes sending the first computer information about the number of printed pages and output print quality of the document file. However, Sansone discloses sending the first computer information about the print quality of the document file (Sansone: summary: check the quality of the printer). It would have been obvious to one having ordinary skill in the art to combine the teachings of Christensen, Nunley, Blumenthal, Wiegley, and Sansone because certain printers are required to print acceptable documents to prevent counterfeiting.

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Christensen as modified does not explicitly disclose sending first computer information about the number of printed pages. However, Nishikawa discloses that limitation (Nishikawa: [0053]: transmitted by the printer...total number of pages printed). It would have been obvious to one having ordinary skill in the art to combine the teachings of Christensen, Nunley, Blumenthal, Wiegley, Sansone, and Nishikawa because it allows the user to understand whether the document transmitted for printing has been successfully printed.

13. As per claim 13 and 18, the combination of Christensen-Rosenberg discloses a method in accordance with claim 12. Christensen further discloses providing payment to said entity (Christensen: paragraph 36).

14. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Christensen in view of Rosenberg and further in view of Sansone.

15. As per claim 14, the combination of Christensen-Rosenberg discloses a method in accordance with claim 12. Christensen-Rosenberg does not explicitly disclose said communicating step further comprises the step of ascertaining quality of said printed first portion. However, Sansone discloses that limitation (Sansone: summary: will be given an opportunity to print to check the print quality). It would have been obvious to one having ordinary skill in the art to combine the teachings of Christensen, Rosenberg, and Sansone because it is necessary to ensure the purchased product is usable.

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16. As per claim 15, the combination of Christensen-Rosenberg-Sansone discloses a method in accordance with claim 12. Sansone further discloses generating a number correlating said document to a printing device printing said first portion (Sansone: column 3 lines 4-24). It would have been obvious to one having ordinary skill in the art to combine the teachings of Christensen, Rosenberg, and Sansone because the number is necessary to validate the printer that is allowed to print it.

17. As per claim 19, the combination of Christensen-Rosenberg discloses a method in accordance with claim 17. Christensen-Rosenberg does not explicitly disclose said receiving step further comprises the step of receiving a proof that said unencrypted portion of the document was satisfactorily printed. However, Sansone discloses that limitation (Sansone: column 7 lines 7-27: the user reply the ticket printing status). It would have been obvious to one having ordinary skill in the art to combine the teachings of Christensen, Rosenberg, and Sansone because it is necessary to make sure printer is capable of printing desired document.

18. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Christensen in view of Rosenberg and further in view of Sansone and further in view of Blumenthal.

19. As per claim 16, the combination of Christensen-Rosenberg-Sansone discloses a method in accordance with claim 15. Christensen-Rosenberg-Sansone does not explicitly disclose communicating further comprises the step of communicating said generated

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number. However, Blumenthal discloses that limitation (Blumenthal: column 3 lines 7-35: the end user sends serial number to obtain decryption key). It would have been obvious to combine the teachings of Christensen, Nunley, and Blumenthal because the serial number allows the document sender to whether the document is being sent to an intended recipient.

### *Response to Arguments*

20. Applicant's arguments with respect to claims 1-4 and 6-23 have been considered but are moot in view of the new ground(s) of rejection.

### *Conclusion*

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shin-Hon Chen whose telephone number is (703) 305-8654. The examiner can normally be reached on Monday through Friday 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (703) 305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Shin-Hon Chen  
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Art Unit 2131

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